



**Universiteit
Leiden**
The Netherlands

John Buridan and Marsilius of Inghen on Consequences

Bos, E.P.

Citation

Bos, E. P. (1976). John Buridan and Marsilius of Inghen on Consequences. *The Logic Of John Buridan (Acts Of The 3Rd European Symposion On Medieval Logic And Semantics, Copenhagen 16 21 November 1975)*, Edited By J. Pinborg, 61-70. Retrieved from <https://hdl.handle.net/1887/10558>

Version: Not Applicable (or Unknown)

License: [Leiden University Non-exclusive license](#)

Downloaded from: <https://hdl.handle.net/1887/10558>

Note: To cite this publication please use the final published version (if applicable).

THE LOGIC OF JOHN BURIDAN

Acts of the 3rd European Symposium
on Medieval Logic and Semantics,
Copenhagen 16.-21. November 1975.

Edited by
Jan Pinborg



Museum Tusculanum
Copenhagen 1976

TABLE OF CONTENTS

Preface	7
List of Participants	8
<i>Mieczysław Markowski</i> (Kraków): Johannes Buridans Kommentare zu Aristoteles' Organon in Mitteleuropas Bibliotheken	9
<i>Graziella Federici Vescovini</i> (Torino): A propos de la diffusion des oeuvres de Jean Buridan en Italie du XIV ^e au XVI ^e siècle	21
<i>Karin Margareta Fredborg</i> (København): Buridan's quaestiones super Rhetoricam Aristotelis	47
<i>E. P. Bos</i> (Leiden): John Buridan and Marsilius of Inghen on Consequences	61
<i>Jan Pinborg</i> (København): The Summulae, Tractatus I De introductionibus	71
<i>L. M. de Rijk</i> (Leiden): On Buridan's Doctrine of Connotation	91
<i>Alfonso Maierù</i> (Roma): Significatio et connotatio chez Buridan	101
<i>Desmond Paul Henry</i> (Manchester): Negative Terms and Buridan's Syllogistic	115
<i>N. J. Green-Pedersen</i> (København): The Summulae of John Buridan, Tractatus VI De locis	121
<i>Sten Ebbesen</i> (København): The Summulae, Tractatus VII De fallaciis	139
Indexes:	
Index of Writings of John Buridan Edited or Quoted	163
Index of Medieval Authors and Scribes	164
Index of Manuscripts	164

JOHN BURIDAN AND MARSILIUS OF INGHEN ON CONSEQUENCES*

E. P. Bos, Leiden

I Introduction.

The purpose of this paper is to fill in a very small detail on the map of the history of Medieval Logic. By making a comparison between two aspects of the tracts on *consequences* by John Buridan and Marsilius of Inghen I shall try to specify the relation between both philosophers and by discussing two points of difference my aim is to clarify the positions of each logician.

My essay has its starting-point in the well-known work of the German scholar Gerhard Ritter, entitled *Marsilius von Inghen und die Okkamistische Schule in Deutschland*, Heidelberg, 1921¹. While discussing the personal relationships of Marsilius, Ritter remarks: "Wahrscheinlich ist dagegen seine persönliche Bekanntschaft mit Johannes Buridanus, von dem er als Logiker und Physiker so vieles übernommen hat: er bezeichnet ihn gelegentlich und zwar mit Nachdruck (*passionatus*) als *magister meus*"². Ritter notices Carl Prantl's opinion, that in his works of logic (such as: the *Commentary of the Prior Analytics of Aristotle* and his *Parva Logicalia*) Marsilius is very much dependent on others: Peter of Spain, William of Ockham and, especially, John Buridan³. But as regards the tract on *consequences*, Ritter remarks: "Grössere Selbständigkeit entwickelt der Abschnitt *De consequentiis*, was auch dessen auf-fallende Verbreitung erklären mag"⁴.

The two points of difference between John and Marsilius I intend to discuss in this paper are both to be found in fundamental parts of the tracts in question: the first is the difference in their definition of the concept of *consequentia*, the second, and perhaps more interesting point, is Marsilius'

* I sincerely wish to thank Prof. De Rijk (Leiden) for the encouragement and advice I received while writing this essay, and Mr. E. P. Kwaadgras (Delft) for his corrections of the English.

1) G. Ritter, *Studien zur Spätscholastik I. Marsilius von Inghen und die Okkamistische Schule in Deutschland*, Heidelberg, 1921, in: Sitz. ber. der Heidelberger Ak. der Wiss., Philos.-Hist. Klasse, (4) 1921.

2) Ritter, 1921, p. 11 (cp. note 1).

3) Ib., p. 49 ff (cp. note 1).

4) Ib. p. 50 (cp. note 1).

rejection of the *consequentia ut nunc* (consequence as of now) in contradistinction with Buridan's position. This last aspect forms part of the chapters on the division of consequence in both tracts.

There are other fundamental differences between the two tracts. For instance, there is a striking difference in the composition between the two tracts, in the degree to which both organize their tracts: Buridan's is presented much more explicitly as an axiomatic-deductive system than Marsilius' work. I will not discuss these questions here, however.

The texts I use are the following: as regards Buridan Professor Hubien from Liège was kind enough to give to me the provisional proof-sheets of his forthcoming critical edition of the tract in the series called *Philosophes médiévaux*. This edition will be based not only on *incunabula* (which alone are mentioned by Faral)⁵, but also on manuscripts.

As far as Marsilius is concerned, I am myself preparing a critical edition, with a commentary, of his *Parva Logicalia*. This edition will differ substantially from the *incunabula* and early printed editions, which are all *abbreviata*. The discussion of the 'consequence as of now', for example, is not found in the *abbreviata*.

As for the dates of the tracts, nothing is certain. Professor Hubien concludes tentatively that Buridan's tract was composed in 1335⁶.

If we follow Ritter, Marsilius of Inghen came to the University of Paris in 1359 and stayed there until 1379⁷. It seems that he composed his *Parva Logicalia* in his Parisian period, and not during his later sojourn in Heidelberg. There are no clues for a more specific date in the manuscripts. The oldest is dated 1382⁸. Buridan, as Faral thinks, died in 1358, so he and Marsilius could not have met personally, but evidence might possibly be found in the manuscripts that Buridan did not, in fact, die until some time later. In that case Faral would not have to explain away some 'data' given in the manuscripts⁹.

For the subject in question none of the other works on logic by Buridan and Marsilius will have to be discussed directly. The *Commentaries on Aristotle's Prior Analytics* of both logicians have no direct bearing on our subject, neither does Buridan's *De syllogismis*.

- 5) E. Faral, *Jean Buridan, Notes sur les manuscrits, les éditions et le contenu de ses ouvrages*, in: Arch. d'Hist. doctr. et litt. du M.-A. (XV), 1946, p. 1-53.
- 6) Johannes Buridanus, *De consequentiis*, critical edition with an introduction by H. Hubien (prov. title).
- 7) G. Ritter, 1921, p. 11 ff (cp. note 1).
- 8) MS München, Clm 4385, f. 45r ff.
- 9) E. Faral, *Jean Buridan, Maître ès arts de l'université de Paris*, 1950.

II On the definition of consequence.

As can be gathered from the table of contents¹⁰, Marsilius starts his exposition with a definition of consequence. Buridan's definition, on the other hand, is found after two preliminary chapters. I shall quote both definitions:

Buridan has: "Consequentia est propositio hypothetica ex antecedente et consequente designans antecedens esse antecedens et consequens esse consequens; haec autem designatio fit per hanc dictionem 'si' vel per hanc dictionem 'ergo' aut equivalentem"¹¹.

When Buridan speaks about *consequentia*, he means a *consequentia vera* which occurs if "illa propositio est antecedens ad aliam quae sic se habet ad illam aliam quod impossibile est qualitercumque ipsa significat sic esse quin qualitercumque illa alia significat sic sit ipsis simul propositis"¹².

Marsilius defines *consequentia bona seu vera*: "Consequentia bona est oratio sic se habens quod impossibile est sic esse qualitercumque per antecedens secundum eius totalem significationem pronunc significatur quin ita sit qualitercumque per consequens significatur secundum eius totalem significationem pronunc"¹³.

In the first place one might observe that both logicians give an intensional definition of a good consequence. This is one of the possibilities of defining a consequence, as can be concluded from the list Paul of Venice gives in his *Logica Magna* (which is printed also in Pinborg's book, *Logik und Semantik im Mittelalter*¹⁴). Moody was only able to consult the *incurabulum* for his study; this version gives an extensional definition¹⁵. It should be said, however, that in defining the material consequence Buridan again gives the extensional formula¹⁶, whereas Marsilius uses the intensional definition whenever he defines the several types of consequences.

A striking difference between Marsilius and Buridan can be seen in the framework within which each philosopher gives the definition. Marsilius, as I said above, begins his tract with the definition of consequence, whereas in Buridan's work it is preceded by an analysis of the truth-values of propositions¹⁷ and of their *causae veritatis*¹⁸. Using the notions of supposition

10) See p. 69 of this paper.

11) Ch. 3, ed. Hubien (cp. note 6).

12) Ch. 3, ed. Hubien (cp. note 6).

13) MS Vienna, CVP 5162, f. 107r.

14) J. Pinborg, *Logik und Semantik im Mittelalter. Ein Überblick*, Stuttgart, 1972, p. 205 ff.

15) E. A. Moody, *Truth and Consequence in Medieval Logic*, Amsterdam, 1953, p. 66.

16) Ch. 4, ed. Hubien (cp. note 6).

17) Ch. 1, ed. Hubien (cp. note 6).

18) Ch. 2, ed. Hubien (cp. note 6).

and ampliation of terms, the causes of truth play an important role in Buridan's exposition, as well as in the seventeen *conclusiones* he mentions in chapter VIII of his first book.

Marsilius' tract starts immediately with an exposition on the definition, in which supposition does not play a major role. More than Buridan he points to the implications of the definition.

The most explicit difference between the two definitions are the final words in them. In Buridan we find: *ipsis simul propositis* or *illis simul formatis*. In Marsilius there is nothing of the sort, instead we find: *secundum eius totalem significationem pronunc.* John's reason for mentioning the above words in his definition is, that the following consequence is a correct one: *omnis homo currit, ergo aliquis homo currit*. A definition without the additions cited would not cover this correct consequence, because the antecedent can be true without the consequent being true, indeed, even without the existence of the consequent as such.

This requirement of existence is felt to be necessary by John Buridan. He also adopts this requirement as a counterfactual condition¹⁹ to exclude the possibility that, if all propositions of a kind, e.g. all negative propositions, are annihilated, the consequent can not be formed at all.

The requirement of existence is retained by Buridan, also when he has transformed his provisional extensional definition into an intensional one. In this aspect Buridan has set the example for many later medieval and post-medieval logicians as is shown by Miss E. J. Ashworth in her excellent work *Language and Logic in the Post-Medieval Period*²⁰.

In Marsilius' tract, as we saw, we find another phrase, which is lacking in Buridan's. It runs: *secundum eius totalem significationem pronunc.* This formula has been introduced by Marsilius because a definition of the valid consequence without this addition would give validity to the following inference: '*homo currit, ergo asinus currit*'. The expression '*significabile*' or '*significatur*' is an ampliative one. It can be equalled with '*potest significari*'. In view of the inference proposed, if, as Marsilius puts it, the signification of "ass" is added to the signification of "man", the consequent follows from the antecedent analytically. Marsilius says: *ponatur casus*, which suggests that this argument is possible within the framework of the game of *obligation*, and in fact, the argument gives the case of "change

19) The '*ablativus absolutus*'.

20) E. J. Ashworth, *Language and Logic in the Post-Medieval Period*, Dordrecht, 1974, p. 122 ff.

of imposition of terms, an issue discussed by Marsilius in his tract *De obligationibus*²¹.

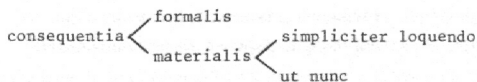
Another reason for adding the formula is that without it, the inference '*omnis homo currit, ergo Sortes currit*' would be a valid consequence. And this is impossible, according to Marsilius, in the case that Socrates is dead. Therefore the definition should not comprise this consequence. This question forms a prelude to Marsilius' discussion on the material "consequence as of now", which will be the subject of our next chapter. In this part, which only treats of the definition of consequence, Marsilius says that *omnis homo currit* only means *omnem hominem currere*, and not *Sortem currere*. It is of no concern if Socrates is dead. These *significata*, Marsilius adds, can exist *naturaliter loquendo*.

There exist several medieval commentaries on Marsilius' tract on consequences. I myself was able to consult nine of the eleven that I know of. On this particular point the commentaries are of no help. Some of them do not even mention the formula added, let alone comment on it. Some others, including the oldest and best one²², do not endeavour so much to interpret Marsilius; they rather use him to express their own views. Commentaries on the *abbreviata* gloss on our formula as follows: *secundum modum significationis quem termini actu habent*²³.

We learn from Miss Ashworth's book²⁴ that several post-medieval logicians use the same formula, but for slightly different reasons, viz. to encounter the difficulties arising from the arbitrary connection between the proposition as sentence-token and the state of affairs to which the words refer.

III On the division of consequence.

In Buridan's exposition as well as in Marsilius' tract the chapter on definition is followed by one on the division of consequence. In chapter IV of Buridan's tract we find the following division:



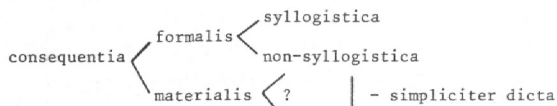
21) MS Vienna, CVP 5162, f. 14or.

22) MS Erfurt, Q 278, F. 57v ff.

23) Clarissimi philosophi Marsilii de ingen textus dialectices de suppositionibus, ampliacionibus, appellacionibus, alienacionibus, restrictionibus et consequentiis abbreviatus....cum solitis questionibus ac sophismatibus perutili brevitate contextis....Viennae, 1512 (C.Pschlacher), f. 20lv ff.

24) Ashworth, 1974, p. 126 (cp. note 22).

And in Marsilius' work we find²⁵:



A first point of difference here is that Marsilius identifies the *consequentia formalis sylogistica* with the syllogism. The syllogism is not treated of by him in this tract, but we are referred to Aristotle's discussions in the *Prior Analytics* and those by Peter of Spain in his *Tractatus*²⁶. Buridan does not give a subdivision of the formal consequence here, but in the next two chapters of his tract on consequences he deals with the syllogism, first the assertorial, then the modal syllogism. In his chapter 3 Buridan explicitly mentions the syllogism as a form of consequence²⁷. The only work of Marsilius relevant to our subject is his *Commentary on the Prior Analytics of Aristotle*, but there, as a commentator on Aristotle, he does not define the syllogism as a form of *consequentia*. Anyway, in both logicians we meet the fourteenth-century tendency to make the syllogism a form of consequence along with others²⁸.

Most striking is the fact that Marsilius does not accept the *consequentia ut nunc* (consequence as of now) in his division. He says that he will not give a subdivision of his own as regards the material consequence: "tertia divisio est de consequentia materiali, sed propter huiusmodi membrorum divisionem et subdivisionem prolixitatem divitans ipsam delinquo"²⁹. Indeed, nowhere else can such a subdivision be found. Marsilius defines the "consequence as of now", which will be rejected by him, as follows: "Dicitur consequentia ut nunc bona ex eo quod in rebus se habentibus ut nunc se habent, quod non potest sic esse sicut significatur per antecedens quin ita sit sicut per consequens significatur. Exemplum ut si Sor est albus: 'Sor currit, ergo album currit'." Compare Buridan's definition³⁰: "quae non sunt simpliciter loquendo bonae, quia possibile est antecedens esse verum sine consequente, sed sunt bonae ut nunc, quia impossibile est rebus omnino se habentibus ut nunc se habent antecedens esse verum sine consequente".

Buridan, hereafter, proceeds to the reduction of the "consequence as of

25) MS Vienna 5162, f. 108r ff.

26) Called '*Summulae*' by Marsilius. Cp. Peter of Spain, *Tractatus*, called afterwards *Summulae logicae*, ed. De Rijk, Assen 1972, ch. III.

27) Liber III, ch. 1 (ed. Hubien) (cp. note 6).

28) Pinborg, 1972, p. 169 (cp. note 14).

29) MS Vienna, CVP 5162, f. 108v.

30) Ch. 4, ed. Hubien (cp. note 6).

now" to a formal one. In treating material consequences Buridan always applies such a reduction. He also extends the notion of a consequence whose truth-value is dependent on situations of a particular time, to the material *consequentia ut tunc* (consequence as of then), and to the future, to the so-called *consequentie promissive*. Legitimation of this extension is, again, the possibility of the reduction to a formal consequence by way of a true proposition.

Marsilius, objecting to such a consequence, remarks that the very same people who accept a "consequence as of now" say that only a valid consequence is a consequence. Nevertheless they call the "consequence as of now" no real consequence, because it *simpliciter loquendo* is no valid consequence. We hear the echo of Buridan. Marsilius is not even prepared to call the "consequence as of now" a consequence by equivocation.

While discussing the definition of consequence we have already seen that the consequence *omnis homo currit, ergo Sortes currit* is not considered valid by Marsilius, viz. in the case that Socrates is dead. Here also the validity of the consequence depends on the situation of a particular time. This situation can be the existence of a subject in question, of the qualification of a certain subject at a particular time. The *modus ponens* is not valid without qualification.

In his chapter on the rules (*regule*) of material consequence Marsilius returns to this question: arguing from a so-called "higher" distributive term to a "lower" one, in the affirmative or the negative, is possible only with a subject remaining constant (*cum constantia subiecti*)³¹. This constancy is expressed in the antecedent, and so these reduced consequences can not any more be properly called "material consequences".

As far as I know, Marsilius is one of the few³² prominent medieval logicians who explicitly reject the "consequence as of now", although this form of consequence has always been treated with suspicion, e.g. by Ockham³³. In spite of what Bocheński states³⁴, the "consequence as of now" kept a place in the systems of logicians after Paul of Venice.

Here I want to mention Albert of Saxony, the pupil of Buridan, but only to give a specimen of the discussion about our form of consequence within Buridan's circle. Albert knows of objections against the "consequence as of then", but he defends this consequence on the occasion of a particular

31) Regula 6a. The counterpart in *Regule* 7a. Cp. also *Regule* 26a and 34a.

32) Like Marsilius: Ralph Strode, Nicolaus Druken de Dacia.

33) W. & M. Kneale, *The Development of Logic*, Oxford 1962, p. 289 ff.

34) I.M. Bocheński, *Formale Logik*, München, 1956, p. 243. See also: Ashworth, 1974, p. 130 ff. (cp. note 20).

argument against it. It has been said that the following consequence is invalid: *omne currens est asinus, omnis homo est currens, ergo omnis homo est asinus*. This consequence is said to be invalid because an impossible consequent follows from a possible antecedent, which is an impossible inference even following Albert's lines. But Albert responds that the antecedent is also impossible because the parts of this copulative proposition are *incompossibiles* (taken separately they are possible, indeed). Albert concludes that this reduced *ut nunc consequentia* is valid³⁵.

Again, this case has only been put forward by me as an example.

We do not have much secondary literature on the subject I have discussed. Even the commentaries fail to give an interpretation of Marsilius' arguments which is relevant to the topic.

My conclusion must be that Marsilius' rejection of the "consequence as of now" also permeates his treatment of the definition of consequence, while this same type of material consequence still kept its place in Buridan's work and in the work of his pupil, Albert of Saxony.

35) Albert of Saxony, *Perutilis logica*, Venetiis, 1522, p. 45vb.

APPENDIX: MARSILIUS OF INGHEN, DE CONSEQUENTIIS.

*Table of contents.**PRIMA PARS.*

- 1) De diffinitione.
- 2) De divisione.
- 3) Regule generales.
- 4) Regule que vocantur generales.
- 5) Regule speciales consequentiarum formalium syllogisticarum.
- 6) Regule de conversionibus.
- 7) De conversione verborum impersonalium.
- 8) De conversione modalium
- 9) De conversione propositionum de necessario de sensu diviso.
- 10) De conversione propositionum de contingentibus.
- 11) Regule de consequentiis materialibus.

PARS SECUNDA: De consequentiis tenentibus ab exponentibus ad expositam.

- 1) De exceptivis.
- 2) De exclusivis.
- 3) De reduplicativis.
- 4) De propositionibus de *incipit* prima pars.
- 5) De propositionibus de *incipit* secunda pars.
- 6) Regule de propositionibus de *incipit*.
- 7) De propositionibus de *desinit*.
- 8) Regule de propositionibus de *desinit*.
- 9) De propositionibus de *differt*.
- 10) De *infinitum*.
- 11) De comparativis.
- 12) De superlativis.
- 13) De signis universalibus tentis collective.
- 14) De signo *totus*.
- 15) De *ita et sicut*.